Name:_____ Date:_____ Period:_____

PRACTICE TEST

Are the two events dependent or independent? Explain.	
Roll a red and a blue number cube. Independent. The one roll doesn't effect the out come of the other	Randomly select a green sock and then another green sock from a drawer when you are getting ready of school. Dependent (options change after the first)

The community council wants to survey the students to find out what theme they want for the upcoming dance. Answer the following questions in as much detail as possible.

Population	Sample
~~The~~ All middle school students (Multiple Answers)	10 kids from each grade (40 kids total) (Multiple Answers)

What question should the community council ask on a survey to find the best results? Explain your reasoning.

Council should ask:
which of the following choices would you prefer for the middle school dance?
Should be unbiased, no adj, etc

How should we pick the students? Conduct a simple random sample. Explain how it is a SRS.

Randomly assign all students in the grade a number, and then draw 10 numbers.

- Unbiased
- Everyone has an equal chance

Which of the three scenarios would be considered a biased sample? WHY?

A. A random sample of students at a middle school shows that 10 students prefer listening to rock, 15 students prefer listening to hip-hop, and 25 students no must while they exercise. It is concluded that half the students prefer no music while exercising.

B. Every tenth person who walks into a department store is surveyed to determine his or her music preference. Out of 150 customers, 70 stated they prefer rock music. The manager concludes that about half the customers prefer rock music.

C. The customers of a music store are surveyed to determine their favorite leisure time activity. The results show that 85% of people like to listen to music in their leisure time.

The population is all people, while the sample was customers in the music store

Draw a double stem-and-leaf plot for the data.

27, 28, 33, 33, 35, 40, 41, 45, 45, 46, 50

Unit 7 Test scores: ~~28, 45, 41, 40, 45, 50, 33, 27, 35, 33, 46~~

Unit 8 Test scores: ~~45, 43, 39, 40, 50, 36, 44, 42, 21, 51, 49~~

21, 36, 39, 40, 42, 43, 44, 45, 49, 50, 51

Unit 7 Test Scores

Unit 8

8, 7	2	1
5, 3, 3	3	6, 9
6, 5, 5, 1, 0	4	0, 2, 3, 4, 5, 9
0	5	0, 1

If the first test needed to have an average of 40, what does the next test need to have a score of?

12

$\frac{40}{480}$

$46+27+28+33+33+35+40+41+45+45+50+X = 440$

$(12)\frac{403+X}{12} = 40(12)$

$403+X = 480$

$X = 77$

Which measure of central tendency best describes the data? Explain.

$\bar{x} = 37$

Mean because there is no outlier

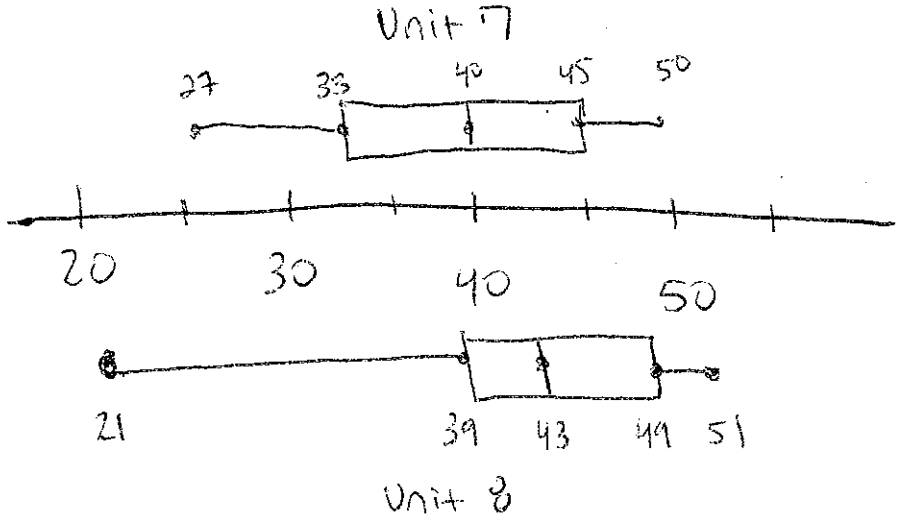
Complete the chart below for the data you used to complete a back to back stem-and-leaf plot.

Unit 7 order from least to greatest: 27, 28, 33, 33, 35 | 40 | 41, 45, 45, 46, 50

Unit 8 order from least to greatest: 21, 39, 39, 40, 43 | 43 | 44, 45, 49, 50, 51

	Unit 7	Unit 8
Minimum	27	21
Lower Quartile	33	39
Median	40	43
Upper Quartile	45	49
Maximum	50	51

Box-and-Whisker Plot



Multiple Answers

Create three questions to ask someone to analyze your box and whisker plot. They can be open-ended, multiple choice, or fill-in the blank.

1) What percent of Unit 7 scores fall between 33 + 40 points.

2) For the Unit 9 test, 50% of the scores fall between 39 and _____.

3)